

AMENDMENTS TO THE SPECIFICATION

Please replace the SUMMARY OF THE INVENTION section with the following amended section:

A lock nut according to the present invention is for preventing a fastening nut [(7)] fastened against a bolt [(6)] from being loosened, the lock nut [(1)] comprising:

a nut body [(2)] having a groove [(30)] formed continuously and concentrically from a circumferential edge of a threaded hole [(4)] of one seat surface [(3)] and a plurality of projections [(5)] formed in the groove [(3)],

wherein each projection [(5)] is made from the same material as that of the nut body [(2)] and has an outer side face [(31)] extending in a tilted manner from the border between the seat surface [(3)] and the groove [(30)] of the nut body [(2)] toward a center of the nut body [(2)] and an inner side face [(32)] being an extension of an inner face of the threaded hole [(4)]; and

wherein a depth of the groove [(30)] is made such that the projection [(5)] crushed when the nut body [(2)] is threadably engaged with the bolt [(6)] and fastened against it by the fastening nut [(7)] does not enter the space between a seat surface [(8)] of the fastening nut [(7)] and the seat surface [(3)] of the nut body [(2)].

An extremity of the projection [(5)] may be formed with a claw [(11)] directed toward the center of the nut body [(2)].

The projection [(5)] may have a screw thread [(12)] being formed on the inner side face [(32)] and threadably engaged with a threaded part of the bolt [(6)].

The fastening nut [(7)] is connected to the side of the projections [(5)] of the nut body [(2)] and a height of the projection [(5)] may be set so that a lead angle and a pitch clearance

of the threaded hole [(4)] of the nut body [(2)] coincide with a lead angle and a pitch clearance of a threaded hole [(10)] of the fastening nut [(7)].

The height of the projection [(5)] may be equal to or more than 30% of a length of the nut body [(2)] in the direction of its central axis.

The projection [(5)] may have a tapered mountain-shape form.

The lock nut according to the present invention has following effects.

(1) Since a plurality of projections is formed in the groove made in the seat surface of the nut body, when the lock nut is fastened with its projections being faced against a seat surface of the fastening nut, the crushed projections are merged into threadedly engaged portions between the threaded part of the bolt and the threaded holes of both the nuts. Further, the crushed projections do not enter the space between the seat surface of the nut body and the seat surface of the fastening nut. Therefore, an effect of preventing looseness can considerably be improved.

(2) By forming a plurality of projections using the same material as that of the nut body, the manufacturing process can be simplified. In addition to metallic materials, the nut body can be made from a synthetic resin according to its usage purpose.

(3) Since the extremity of the projection is formed with the claw directed toward the center of the nut body, a frictional force between the threaded hole of the nut body and the threaded part of the bolt is further increased and an effect of preventing looseness can be improved.

(4) A screw head threadably engaging with the threaded part of the bolt is formed on the inner side face of the projection. Therefore, the projection can easily be crushed. Further, part of the projection can easily be applied around the threaded part of the bolt, which brings about a positive looseness-preventive effect of the lock nut.

(5) In the case where the fastening nut is connected to the lock nut in advance, if the lock nut is separated from the fastening nut and the seat surfaces of the nut body are closely contacted to each other, this closely contacted state shows that the looseness-preventive action (twice fastening operation) is already completed. Therefore, it is easy to check whether or not the twice fastening of the double nut is forgotten.

(6) By setting the height of the projection to a size equal to or more than 30% of the length of the nut body in the direction of its central axis, an effect of preventing looseness can be improved.